

## STN Columbus

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Classification Data  
NEWS 5 FEB 02 Simultaneous left and right truncation (SLART) added  
for CERAB, COMPUAB, ELCOM, and SOLIDSTATE  
NEWS 6 FEB 02 GENBANK enhanced with SET PLURALS and SET SPELLING  
NEWS 7 FEB 06 Patent sequence location (PSL) data added to USGENE  
NEWS 8 FEB 10 COMPENDEX reloaded and enhanced  
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precise author group fields and 2009 MeSH terms  
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NEWS 20 MAR 20 CAS databases on STN enhanced with new super role  
for nanomaterial substances  
NEWS 21 MAR 23 CA/CAPLUS enhanced with more than 250,000 patent  
equivalents from China  
NEWS 22 MAR 30 IMSPATENTS reloaded and enhanced  
NEWS 23 APR 03 CAS coverage of exemplified prophetic substances  
enhanced  
NEWS 24 APR 07 STN is raising the limits on saved answers  
  
NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,  
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.  
  
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FILE 'HOME' ENTERED AT 11:42:50 ON 23 APR 2009

=> fil ca; s thermoplastic (4a) elastomer?  
COST IN U.S. DOLLARS

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FILE 'CA' ENTERED AT 11:43:38 ON 23 APR 2009  
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FILE COVERS 1907 - 22 Apr 2009 VOL 150 ISS 17  
FILE LAST UPDATED: 22 Apr 2009 (20090422/ED)

CA now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

116954 THERMOPLASTIC  
73740 ELASTOMER?  
L1 14883 THERMOPLASTIC (4A) ELASTOMER?

=> s l1 and toner#  
40191 TONER#  
L2 51 L1 AND TONER#

=> s l2 and norbornene  
17474 NORBORNENE  
L3 1 L2 AND NORBORNENE

=> d bib

L3 ANSWER 1 OF 1 CA COPYRIGHT 2009 ACS on STN

Full Text

AN 143:212957 CA

TI **Thermoplastic elastomer** compositions with good processability and rubber elasticity and low softening agent bleeding for molded articles and low hardness sealing materials

IN Kanae, Kentarou; Maeda, Minoru; Tsutsumi, Masami; Hasegawa, Kenji

PA JSR Corporation, Japan

SO PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005075555	A1	20050818	WO 2005-JP1989	20050203
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,			

RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,  
MR, NE, SN, TD, TG

EP 1712591	A1	20061018	EP 2005-710041	20050203
R: DE, FR, GB				
CN 1946788	A	20070411	CN 2005-80012151	20050203
US 20070173591	A1	20070726	US 2007-588198	20070111
PRAI JP 2004-27238	A	20040203		
JP 2004-56672	A	20040301		
WO 2005-JP1989	W	20050203		

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d kwic 40-51

1 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE  
The answer numbers requested are not in the answer set.  
ENTER ANSWER NUMBER OR RANGE (1):end

=> d kwic 40-51 12

L2 ANSWER 40 OF 51 CA COPYRIGHT 2009 ACS on STN  
AB Recording materials, such as plastic films for overhead projectors, have an ink- or **toner**-supporting layer on ≥1 side of the base material. The supporting layer is transparent, having cellular structure, and formed by pressing. . . rubbery material can be selected from syndiotactic 1,2-butadiene rubbers, hydrogenated butadiene-styrene rubbers, ethylene-propylene rubbers, EPDM rubbers, ethylene-butene rubbers, and styrene-based **thermoplastic elastomers**.

L2 ANSWER 41 OF 51 CA COPYRIGHT 2009 ACS on STN  
TI Electrophotographic capsule **toners** and image forming method using the **toners**  
AB The **toners** comprise a core material at least contg. a fixing component and a **thermoplastic elastomer** and a shell covering the core. The image forming method includes (1) formation of latent image, (2) development of the latent image with the capsule **toners**, and (3) transfer of the **toner** image on a receptor. The capsule **toners** show good transferability and fixability, and cause no ghost phenomena.  
ST **toner** capsule core **thermoplastic elastomer**  
IT Rubber, butadiene-styrene, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(block, triblock, electrophotog. capsule **toners** with core contg., for good transferability and fixability, Cariflex TR 1101)  
IT Rubber, synthetic  
RL: TEM (Technical or engineered material use); USES (Uses)  
(isoprene-styrene, block, Septon 2003; electrophotog. capsule **toners** with core contg., for good transferability and fixability)  
IT Electrophotographic developers  
(**toners**, capsules contg. core materials contg. **thermoplastic elastomers**, with good transferability and fixability)  
IT 106107-54-4 694491-73-1  
RL: TEM (Technical or engineered material use); USES (Uses)  
(rubber, block, triblock, electrophotog. capsule **toners** with core contg., for good transferability and fixability, Cariflex TR 1101)  
IT 105729-79-1, Isoprene-styrene block copolymer  
RL: USES (Uses)  
(rubber; electrophotog. capsule **toners** with core contg., for good transferability and fixability)

L2 ANSWER 42 OF 51 CA COPYRIGHT 2009 ACS on STN  
AB The recording sheets comprise an ink- or **toner**-receptive layer contg. a styrene-type **thermoplastic elastomer** laminated on a substrate. The sheets provide clear image with good color-reproducibility and low haze and are useful for making. . .

L2 ANSWER 43 OF 51 CA COPYRIGHT 2009 ACS on STN  
TI **Toner** composition with **elastomeric thermoplastic** polymer and process of preparing  
AB A method is described for the prepn. of electrostatog. **toner** particles which involves the surface treatment of a pigment by depositing thereon a

coating of an **elastomeric thermoplastic** polymer. The method involves prepg. a polymer soln. by dissolving an **elastomeric thermoplastic** polymer selected from the group consisting of linear styrene-isoprene-styrene triblock copolymers, linear styrene-ethylene-butylene-styrene triblock copolymers, linear styrene-isoprene diblock copolymers and. . . pigment dispersion by mixing at ambient temp. a pigment, a 1st polymer material and a 2nd solvent in which the **elastomeric thermoplastic** polymer is insol. at ambient temp.; admixing the polymer soln. with the pigment dispersion so resulting in the **elastomeric thermoplastic** polymer pptg. out upon the surface of the pigment; mixing the **elastomeric thermoplastic** polymer coated pigment dispersion thus formed with a solvent in which the **elastomeric thermoplastic** polymer is insol. at ambient temp. and, optionally, a 2nd polymer material and, optionally, a charge-control agent to form an. . .

- ST electrophotog **toner elastomeric thermoplastic** polymer
- IT Rubber, synthetic  
RL: TEM (Technical or engineered material use); USES (Uses)  
(ethylene-propene-styrene, block, diblock, electrophotog. **toner** contg.)
- IT Rubber, butadiene-styrene, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(hydrogenated, block, triblock, electrophotog. **toner** contg.)
- IT Rubber, synthetic  
RL: TEM (Technical or engineered material use); USES (Uses)  
(isoprene-styrene, block, diblock, electrophotog. **toner** contg.)
- IT Rubber, synthetic  
RL: TEM (Technical or engineered material use); USES (Uses)  
(isoprene-styrene, block, triblock, electrophotog. **toner** contg.)
- IT Electrophotographic developers  
(**toners, elastomeric thermoplastic** polymer for)
- IT 108388-87-0, Ethylene-propylene-styrene block copolymer 700876-76-2  
RL: USES (Uses)  
(diblock, rubber, electrophotog. **toner** contg.)
- IT 106107-54-4 694491-73-1  
RL: USES (Uses)  
(rubber, hydrogenated, block, triblock, electrophotog. **toner** contg.)
- IT 105729-79-1, Isoprene-styrene block copolymer 106108-28-5,  
Butylene-ethylene-styrene block copolymer 700836-36-8 717133-99-8  
RL: USES (Uses)  
(triblock, rubber, electrophotog. **toner** contg.)
- L2 ANSWER 44 OF 51 CA COPYRIGHT 2009 ACS on STN
- II Elastomer compositions for **toner** sealing parts of copying machines
- AB The title comps., for sealing parts with flexural modulus 200-1500 kg/cm<sup>2</sup>, comprise 85-100% **thermoplastic elastomers** and 0-15% lubricants. Thus, sealing parts prepd. from 95% urethane elastomer and 5% PTFE had flexural modulus 310 kg/cm<sup>2</sup>.
- ST urethane elastomer PTFE **toner** sealer; flexural modulus polyurethane **toner** sealer
- IT Rubber, urethane, uses  
RL: USES (Uses)  
(for **toner** sealing parts with low flexural modulus, contg. lubricants)
- IT Polyamides, uses  
RL: PREP (Preparation)  
(rubber, for **toner** sealing parts with low flexural modulus, contg. lubricants)
- IT Rubber, synthetic  
RL: USES (Uses)  
(polyamide, for **toner** sealing parts with low flexural modulus, contg. lubricants)
- IT Rubber, synthetic  
RL: USES (Uses)  
(polyolefin, for **toner** sealing parts with low flexural modulus, contg. lubricants)
- IT 9002-84-0, PTFE  
RL: USES (Uses)

(thermoplastic rubber contg., for **toner** sealing parts with low flexural modulus)

IT 9002-88-4, Polyethylene  
 RL: USES (Uses)  
 (ultrahigh-mol.-wt., thermoplastic rubber contg., for **toner** sealing parts with low flexural modulus)

L2 ANSWER 45 OF 51 CA COPYRIGHT 2009 ACS on STN  
 TI Seals for **toners** in electrophotographic equipment  
 AB Title seals, for preventing intrusion of **toners** into bearings in electrophotog. copiers, are molded from compns. contg. 100 parts **thermoplastic** urethane **elastomers**, polyester or polyamide elastomers, and 0.5-20 parts functional group-free silicone oils. Thus, a seal ring was prepd. by injection molding a blend of 100 parts Desmopan 472 (**thermoplastic** urethane **elastomer**) and 1 parts DKQ 8 and used to protect a polyacetal bearing. The seal ring showed durability  $\geq 200$  h, kinetic. . . .

ST **toner** seal ring electrophotog app; urethane elastomer silicone seal **toner**; polyester elastomer silicone seal photocopier; polyamide elastomer silicone seal photocopier

IT Siloxanes and Silicones, uses  
 RL: USES (Uses)  
 (**thermoplastic** urethane **elastomers** contg., seal rings from, for prevention of **toner** intrusion into bearings in electrophotog. copier)

IT Rubber, synthetic  
 RL: USES (Uses)  
 (polyamide, thermoplastic, contg. silicones, seal rings from, for prevention of **toner** intrusion into bearings in electrophotog. copier)

IT Rubber, synthetic  
 RL: USES (Uses)  
 (polyester, thermoplastic, contg. silicones, seal rings from, for prevention of **toner** intrusion into bearings in electrophotog. copier)

IT Seals (mechanical)  
 (ring, **thermoplastic** urethane **elastomers** contg. silicones, for prevention of **toner** intrusion into bearings in electrophotog. app.)

IT Rubber, urethane, uses  
 RL: USES (Uses)  
 (thermoplastic, contg. silicones, seal rings from, for prevention of **toner** intrusion into bearings in electrophotog. copier)

IT Electrophotographic developers  
 (**toners**, ring seals for, from **thermoplastic elastomers** lubricated with silicones)

L2 ANSWER 46 OF 51 CA COPYRIGHT 2009 ACS on STN  
 AB The title fluids contain satd. **thermoplastic elastomer** binder, paraffin solvent, and TiO<sub>2</sub>. A correction fluid from Tuftec M1911 4.5, pentane 45.5, and TiO<sub>2</sub> 50 g could be used with good hiding and fast drying on prints by ball pens, fountain pens, photocopier **toners**, fax, etc.

L2 ANSWER 47 OF 51 CA COPYRIGHT 2009 ACS on STN  
 TI Electrostatographic **toner** particles coated with insulative spherical particles  
 AB The title **toner** particles are coated with insulative spherical particles made by dispersing elec. conductive fine particles in a binder resin comprising mainly a **thermoplastic elastomer**.  
 ST electrostatog **toner** insulative spherical particle  
 IT Polyesters, uses and miscellaneous  
 Rubber, butadiene-styrene, uses and miscellaneous  
 Urethane polymers, uses and miscellaneous  
 RL: USES (Uses)  
 (binders, for electrostatog. **toners**, coated with insulative spherical particles)

IT Electrography  
 (developers, **toners**, contg. elastomeric binders, coated with insulative spherical particles)

IT Electrophotographic developers  
 (**toners**, contg. elastomeric binders, coated with insulative spherical particles)

IT 9002-88-4, Polyethylene 24937-78-8, EVA (polymer)  
 RL: USES (Uses)  
 (binder, for electrostatog. **toners**, coated with insulative spherical particles)

IT 7631-86-9, Silica, uses and miscellaneous  
 RL: USES (Uses)  
 (colloidal or hydrophobic, electrostatog. **toners** coated with)

IT 24937-79-9, Poly(vinylidene fluoride)  
 RL: USES (Uses)  
 (powd., electrostatog. **toners** coated with)

IT 9003-55-8  
 RL: USES (Uses)  
 (rubber, binders, for electrostatog. **toners**, coated with insulative spherical particles)

L2 ANSWER 48 OF 51 CA COPYRIGHT 2009 ACS on STN

TI Electrophotographic **toner** of spherical particles in **thermoplastic elastomer**

AB The **toner** comprises spherical particles which are based on conductive fine particles (e.g., carbon black) and contained in a **thermoplastic elastomer** (e.g., HR 5041). Optionally, the size of the spherical particles may be 1-5  $\mu\text{m}$ . The control of the **toner** cond. in developing and transferring is made easy and clear images are obtained.

ST **thermoplastic elastomer** electrophotog **toner**

IT Rubber, synthetic  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (electrophotog. **toners** contg.)

IT Carbon black, uses and miscellaneous  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (electrophotog. **toners** contg., in **thermoplastic elastomers**)

IT Viscoelastic materials  
 (thermoplastic, electrophotog. **toners** contg.)

IT Electrophotographic developers  
 (**toners**, contg. **thermoplastic elastomers**)

IT 1317-61-9, Iron oxide (Fe<sub>3</sub>O<sub>4</sub>), uses and miscellaneous  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (electrophotog. **toners** contg., in **thermoplastic elastomers**)

L2 ANSWER 49 OF 51 CA COPYRIGHT 2009 ACS on STN

TI **Toner** containing **thermoplastic elastomer**

AB In the title **toner**, a conductive powder is dispersed in a binder resin contg. **thermoplastic elastomer** having softening point of 50-150° and hardness (JIS A) of 50-90 degrees. This **toner** is esp. useful in a simultaneous electrostatic recording device and transfer onto a normal paper. Thus, a mixt. of EV 40X (EVA resin), EPP2000 (Fe<sub>3</sub>O<sub>4</sub>), and Carbon black was kneaded, then pulverized, and filtered. This **toner** showed specific resistivity of 108  $\Omega\text{-cm}$  under 500 g/cm<sup>2</sup> pressure and 1013  $\Omega\text{-cm}$  without pressure.

ST **thermoplastic elastomer** electrog **toner** binder

IT Carbon black, uses and miscellaneous  
 RL: USES (Uses)  
 (conductive particle, electrostatog **toner** contg.)

IT Electrography  
 (developers, **toners**, binders, contg. **thermoplastic elastomers**)

IT Rubber, synthetic  
 RL: USES (Uses)  
 (polyolefin, binder, for electrostatog. **toner**)

IT Electrophotographic developers  
 (**toners**, binders, contg. **thermoplastic elastomers**)

IT 1317-61-9, uses and miscellaneous  
 RL: USES (Uses)  
 (magnetic powder, electrostatog. **toner** contg.)

IT 24937-78-8  
 RL: USES (Uses)  
 (rubber, binder, for electrostatog. **toner**, EV40X)

L2 ANSWER 50 OF 51 CA COPYRIGHT 2009 ACS on STN

AB . . . images upon a tonable photosensitive layer is described which

uses a transfer layer contg. a finely powd. dye as a **toner** material.  
The method, which is useful in the printing industry for producing color  
proofs, gives a resoln. of 2-98% dots. . . consists of 55-97 wt.% of  
≥1 powd. polymer with a min. film-forming temp. > 50° and  
3-45 wt.% of ≥1 **thermoplastic** and/or **elastomeric** polymer, used  
as a latex or a dissolved polymer, with a glass transition temp. that is  
≥10° under the min.. . .

IT Photoimaging compositions and processes

(photopolymer, tonable, development of, by using **toner**-contg.  
transfer material)

L2 ANSWER 51 OF 51 CA COPYRIGHT 2009 ACS on STN

AB . . . fountain or dampening soln. is prepd. by coating a support with a  
copolymer comprised of siloxane blocks curable to an **elastomeric**  
ink-releasable condition and **thermoplastic** blocks, selectively curing  
the siloxane blocks so as to render the polymer ink releasing without  
affecting the thermoplastic blocks, depositing. . . 170-75° to  
crosslink the dimethylsiloxane, and cooled. A Se electrophotog. plate was  
charged, exposed, and developed with ink-accepting Xerox 2400 **toner**.  
The **toner** image was then transferred to the coated plate and heated to  
180° for 1 min to give a lithog. plate.. . .

IT Photography, electro-

(ink-accepting polymer **toner** images by, for waterless lithog.  
plates)

IT 25213-39-2

RL: USES (Uses)

(electrophotog. ink-accepting **toner** images from, for  
waterless lithog. plates with crosslinked siloxane copolymer surface  
coating)

=> d bib 48 49

1 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE

The answer numbers requested are not in the answer set.

ENTER ANSWER NUMBER OR RANGE (1):end

=> d bib 48 49 12

L2 ANSWER 48 OF 51 CA COPYRIGHT 2009 ACS on STN

Full Text

AN 110:125348 CA

OREF 110:20513a,20516a

TI Electrophotographic **toner** of spherical particles in **thermoplastic**  
**elastomer**

IN Mizumoto, Teruyuki

PA Seiko Epson Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63244050	A	19881011	JP 1987-78247	19870331
PRAI	JP 1987-78247		19870331		

L2 ANSWER 49 OF 51 CA COPYRIGHT 2009 ACS on STN

Full Text

AN 109:119678 CA

OREF 109:19785a,19788a

TI **Toner** containing **thermoplastic elastomer**

IN Mizumoto, Teruyuki

PA Seiko Epson Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63089869	A	19880420	JP 1986-235706	19861003
PRAI	JP 1986-235706		19861003		

=> d kwic 20-29

1 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE  
The answer numbers requested are not in the answer set.  
ENTER ANSWER NUMBER OR RANGE (1):end

=> d kwic 20-29 12

L2 ANSWER 20 OF 51 CA COPYRIGHT 2009 ACS on STN

TI Electrostatographic **toners** containing specific **thermoplastic elastomers**

AB The title **toner** consists of colored particles and external additives, wherein the colored particles contain styrene-based **thermoplastic elastomers** having polar groups. The **toner** shows good storageability and provides low fixing temp. and good image quality for long time under various environmental conditions.

ST electrostatog **toner thermoplastic elastomer**

IT Synthetic rubber, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(butadiene-isoprene-styrene, hydrogenated, block, triblock, hydroxy-terminated; electrostatog. **toners**)

IT Electrographic **toners**

Electrophotographic **toners**

(electrostatog. **toners**)

IT 7631-86-9, RX 100, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(RX 100, external additive; electrostatog. **toners**)

IT 100-42-5DP, Styrene, copolymer with acrylates and hydroxy terminated rubber

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(colored particles; electrostatog. **toners**)

IT 80-62-6DP, Methyl methacrylate, copolymer with acrylates and hydroxy terminated rubber 141-32-2DP, Butyl acrylate, copolymer with acrylates and hydroxy terminated rubber 1321-74-0DP, Divinylbenzene, copolymer with acrylates and hydroxy terminated rubber 122525-04-6DP, Macromonomer AA 6, copolymer with acrylates and hydroxy terminated rubber

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(electrostatog. **toners**)

L2 ANSWER 21 OF 51 CA COPYRIGHT 2009 ACS on STN

AB The electrophotog. app. comprises a (A) charging conductor consisting of a conductive support having an elastic surface, e.g. **thermoplastic elastomer**, and showing Ascar C hardness  $\leq 85^\circ$  and microhardness  $\leq 85^\circ$  and (B) a means for cleaning having microhardness  $60^\circ$ - $80^\circ$ , and the max. elastic compressive load of the developer is 15-70 mg. Image defects due to staining of charge rollers with **toners** are prevented.

IT Epoxy resins, preparation

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)  
(acrylic-polyester-, graft, core-shell, **toners**; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT Carbon black, uses

Quaternary ammonium compounds, uses

RL: DEV (Device component use); USES (Uses)  
(conductor in charge rollers; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT Electrophotographic apparatus

(electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT Styrene-butadiene rubber, uses

RL: DEV (Device component use); USES (Uses)  
(hydrogenated, thermoplastic, charge roller; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT Silicone rubber, preparation

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)



(polyester-polyurethane-, block, vulcanized, cleaning roller; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT Synthetic rubber, preparation  
 RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)  
 (polyester-polyurethane-siloxane, block, vulcanized, cleaning roller; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT Urethane rubber, preparation  
 RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)  
 (polyester-siloxane-, block, vulcanized, cleaning roller; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT Urethane rubber, preparation  
 RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)  
 (polysiloxane-, block, vulcanized, cleaning roller; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT Silicone rubber, preparation  
 RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)  
 (polyurethane-, block, vulcanized, cleaning roller; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT Epichlorohydrin rubber  
 Neoprene rubber, uses  
 Nitrile rubber, uses  
 Thermoplastic rubber  
 Urethane rubber, uses  
 RL: DEV (Device component use); USES (Uses)  
 (surface layer; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT 13463-67-7, Titania, uses  
 RL: DEV (Device component use); USES (Uses)  
 (conductor in charge rollers; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT 80-05-7DP, Bisphenol A, epoxidized, grafted acrylic polyesters  
 100-42-5DP, Styrene, grafted acrylic epoxy resin-polyesters 110-17-8DP, Fumaric acid, grafted acrylic epoxy resin-polyesters 141-32-2DP, Butyl acrylate, grafted acrylic epoxy resin-polyesters 1321-74-0DP, Divinylbenzene, grafted acrylic epoxy resin-polyesters  
 RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)  
 (core-shell, **toners**; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT 9010-98-4  
 RL: DEV (Device component use); USES (Uses)  
 (neoprene rubber, surface layer; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT 9003-18-3  
 RL: DEV (Device component use); USES (Uses)  
 (nitrile rubber, surface layer; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT 77-99-6DP, Trimethylolpropane, polyester-polyurethane-siloxane  
 101-68-8DP, Diphenylmethane diisocyanate, polyester-polyurethane-siloxane  
 110-63-4DP, 1,4-Butanediol, polyester-polyurethane-siloxane  
 26570-73-0DP, Adipic acid-butylene glycol-ethylene glycol copolymer, polyurethane-siloxane  
 RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)  
 (rubber, vulcanized, cleaning roller; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT 9003-55-8  
 RL: DEV (Device component use); USES (Uses)

(styrene-butadiene rubber, hydrogenated, thermoplastic, charge roller; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT 39839-73-1P, Acrylic acid-butyl acrylate-styrene copolymer ammonium salt 60806-47-5P, Butyl acrylate-divinylbenzene-styrene copolymer  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(**toner**; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT 26587-37-1, Epichlorohydrin-ethylene oxide allyl glycidyl ether copolymer  
RL: DEV (Device component use); USES (Uses)  
(vulcanized rubber, charge rollers; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

IT 691393-90-5P, Adipic acid-1,4-butanediol-ethylene glycol-MDI-trimethylolpropane-X 22-160AS block copolymer  
RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)  
(vulcanized rubber, cleaning roller surface; electrophotog. app. with charge rollers having elastomer surfaces for prevention of staining with **toners**)

L2 ANSWER 22 OF 51 CA COPYRIGHT 2009 ACS on STN

TI Optically transparent film, **toner** fixing apparatus, and electrophotographic color imaging apparatus

AB . . . wherein the film at least includes an elastic layer. The elastic layer shows a specified hardness, is made up of **thermoplastic elastomer**, and has a thickness of  $\geq 20 \mu\text{m}$ . The film may include a protective layer.

ST optically transparent multilayer film electrophotog OHP sheet imaging app; **toner** fixing app optically transparent multilayer film electrophotog OHP

IT Optical films  
(multilayer; optically transparent film, **toner** fixing app., and electrophotog. color imaging app.)

IT Electrophotographic apparatus  
Electrophotographic paper  
Overhead projection slides  
(optically transparent film, **toner** fixing app., and electrophotog. color imaging app.)

L2 ANSWER 23 OF 51 CA COPYRIGHT 2009 ACS on STN

TI Transparent projection films, formation of **toner** images on the films and its electrophotography apparatus, and **toner** image fixation apparatus thereof

AB The transparent film has an image-forming face whereupon color **toner** grains are supported to form images, useful for OHP sheets, etc., has an elastic layer satisfying  $td \geq \beta \cdot Da/8$  [ $\beta(^{\circ})$  = microrubber hardness,  $td (\mu\text{m})$  = thickness, and  $Da (\mu\text{m})$  = av. grain diam. of **toners**]. The image-forming face may comprise the elastic layer or a protection layer disposed on the elastic layer. The elastic layer may be disposed on a transparent base film. The elastic layer may comprise **thermoplastic elastomers**.

ST overhead projection sheet color electrophotog image; elastic layer overhead projection sheet; **thermoplastic elastomer** layer OHP sheet electrophotog; hot roller electrophotog fixation OHP sheet; transparent plastic film color electrophotog sheet

L2 ANSWER 24 OF 51 CA COPYRIGHT 2009 ACS on STN

AB The belt contains an elec. conductive agent and an epoxy-contg. **thermoplastic elastomer** in a matrix resin. The belt, preferably an endless belt contg. carbon black as elec. conductor, is used as the intermediate part for transferring **toner** in the electrophotog. printer. The belt shows elec. resistivity independent from elec. field (i.e., elec. voltage for transfer) and environmental. . .

ST endless belt elec conductor matrix resin; epoxy substituted **thermoplastic elastomer** endless belt; electrophotog **toner** transfer endless belt

IT Carbon black, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(Printex 150T; belt made of matrix resin contg. elec. conductor and epoxy-substituted **thermoplastic elastomer** for electrophotog. app.)

IT Electric conductors  
Electrophotographic apparatus  
(belt made of matrix resin contg. elec. conductor and epoxy-substituted  
**thermoplastic elastomer** for electrophotog. app.)

IT Thermoplastic rubber  
RL: MOA (Modifier or additive use); USES (Uses)  
(belt made of matrix resin contg. elec. conductor and epoxy-substituted  
**thermoplastic elastomer** for electrophotog. app.)

IT Polycarbonates, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(belt made of matrix resin contg. elec. conductor and epoxy-substituted  
**thermoplastic elastomer** for electrophotog. app.)

IT Polyesters, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(belt made of matrix resin contg. elec. conductor and epoxy-substituted  
**thermoplastic elastomer** for electrophotog. app.)

IT Styrene-butadiene rubber, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(block, triblock, epoxidized, Epofriend A1005; belt made of matrix  
resin contg. elec. conductor and epoxy-substituted  
**thermoplastic elastomer** for electrophotog. app.)

IT Belts  
(endless; belt made of matrix resin contg. elec. conductor and  
epoxy-substituted **thermoplastic elastomer** for  
electrophotog. app.)

IT 24936-68-3, Lexan 131, uses 25038-91-9, PCTG 5445 25640-14-6, PETG  
6763  
RL: TEM (Technical or engineered material use); USES (Uses)  
(belt made of matrix resin contg. elec. conductor and epoxy-substituted  
**thermoplastic elastomer** for electrophotog. app.)

IT 106107-54-4 694491-73-1  
RL: MOA (Modifier or additive use); USES (Uses)  
(styrene-butadiene rubber, block, triblock, epoxidized, Epofriend  
A1005; belt made of matrix resin contg. elec. conductor and  
epoxy-substituted **thermoplastic elastomer** for  
electrophotog. app.)

L2 ANSWER 25 OF 51 CA COPYRIGHT 2009 ACS on STN

TI **Toner** support, development device, process cartridge, and fabrication of  
**toner** support

AB A **toner** support having superior resistance and recycling properties is  
described, which comprises a core metal having a conductive elastic layer  
and a coating layer. The conductive elastic layer comprises a  
**thermoplastic elastomer** 15 - 70, crosslinkable **elastomer** 30 - 85 wt.  
% with respect to the elastic layer, and conductive filler 1 - 20 wt.  
parts with respect to 100 wt. parts of the elastomers. The  
**thermoplastic elastomer** forms a matrix phase, the crosslinkable  
elastomer forms a dispersed phase, and the conductive filler is in the  
**thermoplastic elastomer**. The coating layer comprises a resistive  
layer. A development device having the above support and a process  
cartridge of the. . .

ST **toner** support development device cartridge **thermoplastic elastomer**  
conductive filler

IT Containers  
(cartridges; crosslinked **thermoplastic elastomer**  
**toner** support, development device, process cartridge, and  
fabrication of **toner** support)

IT Fillers  
(conductive; crosslinked **thermoplastic elastomer**  
**toner** support, development device, process cartridge, and  
fabrication of **toner** support)

IT Electrographic **toners**  
Photographic developers  
(crosslinked **thermoplastic elastomer toner**  
support, development device, process cartridge, and fabrication of  
**toner** support)

IT **Thermoplastic** rubber  
RL: DEV (Device component use); USES (Uses)  
(crosslinked **thermoplastic elastomer toner**  
support, development device, process cartridge, and fabrication of  
**toner** support)

IT EPDM rubber

RL: DEV (Device component use); USES (Uses)  
 (ethylene-ethylidenenorbornene-propene, reaction product with ethylene glycol dimethacrylate and triblock isoprene-styrene rubber; crosslinked **thermoplastic elastomer toner** support, development device, process cartridge, and fabrication of **toner** support)

IT Isoprene-styrene rubber  
 RL: DEV (Device component use); USES (Uses)  
 (hydrogenated, block, triblock, reaction product with ethylene glycol dimethacrylate and EDPM rubber; crosslinked **thermoplastic elastomer toner** support, development device, process cartridge, and fabrication of **toner** support)

IT 97-90-5D, Ethylene glycol dimethacrylate, reaction product with triblock isoprene-styrene rubber and EDPM rubber  
 RL: DEV (Device component use); USES (Uses)  
 (crosslinked **thermoplastic elastomer toner** support, development device, process cartridge, and fabrication of **toner** support)

IT 105729-79-1 700836-36-8  
 RL: DEV (Device component use); USES (Uses)  
 (isoprene-styrene rubber, hydrogenated, block, triblock, reaction product with ethylene glycol dimethacrylate and EDPM rubber; crosslinked **thermoplastic elastomer toner** support, development device, process cartridge, and fabrication of **toner** support)

L2 ANSWER 26 OF 51 CA COPYRIGHT 2009 ACS on STN

TI Electrophotographic **toner** blade comprising urethane rubber part and metal support and manufacture of the blade

AB The blade consists of a metal support and a **thermoplastic** polyurethane **elastomer** part, in which the support is partially sandwiched between 1 side edge of the elastomer part so that the elastomer. . .

ST electrophotog **toner** blade **thermoplastic** polyurethane **elastomer**; metal supported urethane rubber **toner** blade; adhesive free metal supported rubber blade; injection molding urethane rubber **toner** blade

IT Adhesives  
 Blades  
 Electrophotographic apparatus  
 (electrophotog. **toner** blade comprising urethane rubber layer and metal support bonded without using adhesive)

IT Galvanized steel  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
 (electrophotog. **toner** blade comprising urethane rubber layer and metal support bonded without using adhesive)

IT Molding of plastics and rubbers  
 (injection; for electrophotog. **toner** blade comprising urethane rubber layer and metal support bonded without using adhesive)

IT Urethane rubber, processes  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
 (thermoplastic, Resamine P; electrophotog. **toner** blade comprising urethane rubber layer and metal support bonded without using adhesive)

L2 ANSWER 27 OF 51 CA COPYRIGHT 2009 ACS on STN

AB The elec. conductive endless belt with a substrate made of polymer alloy comprising **thermoplastic** polycarbonate and **thermoplastic elastomer** or blend of **thermoplastic** polycarbonate and **thermoplastic elastomer** is used for transferring and conveying of a recording medium which is supported on the belt by electrostatic absorption. The medium is conveyed among 4 kinds of image-forming medium, i.e., electrophotog. photoconductor drums so that each of the color **toner** image is transferred by tandem process. Alternatively, the endless belt accepts the **toner** image and transfers the image to the recording medium. The electrophotog. app. using the belt is also claimed. The endless. . .

ST elec conductive endless belt electrophotog app; polycarbonate polymer alloy blend endless belt; **thermoplastic elastomer** polycarbonate blend endless belt; tandem electrophotog copying machine

IT Electric conductors

Electrophotographic apparatus  
 (elec. conductive endless belt using alloy or blend of polycarbonate and **thermoplastic elastomer** for electrophotog. app.)

IT Acrylic rubber  
 Polycarbonates, properties  
 Polymer blends  
 Thermoplastic rubber  
 RL: DEV (Device component use); PRP (Properties); USES (Uses)  
 (elec. conductive endless belt using alloy or blend of polycarbonate and **thermoplastic elastomer** for electrophotog. app.)

IT Belts  
 (endless; elec. conductive endless belt using alloy or blend of polycarbonate and **thermoplastic elastomer** for electrophotog. app.)

IT Carbon black, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (in elec. conductive endless belt using alloy or blend of polycarbonate and **thermoplastic elastomer** for electrophotog. app.)

IT 381171-77-3, Panlite SC 150  
 RL: DEV (Device component use); PRP (Properties); USES (Uses)  
 (elec. conductive endless belt using alloy or blend of polycarbonate and **thermoplastic elastomer** for electrophotog. app.)

L2 ANSWER 28 OF 51 CA COPYRIGHT 2009 ACS on STN

AB The elec. conductive endless belt with a substrate made of thermoplastic polyamide, polymer alloy comprising **thermoplastic** polyamide and **thermoplastic elastomer**, or blend of **thermoplastic** polyamide and **thermoplastic elastomer** is used for transferring and conveying of a recording medium which is supported on the belt by electrostatic absorption. The medium is conveyed among 4 kinds of image-forming medium, i.e., electrophotog. photoconductor drums so that each of the color **toner** image is transferred by tandem process. Alternatively, the endless belt accepts the **toner** image and transfers the image to the recording medium. The electrophotog. app. using the belt is also claimed. The endless. . . .

ST elec conductive endless belt electrophotog app; polyamide polymer alloy blend endless belt; **thermoplastic elastomer** polyamide blend endless belt; tandem electrophotog copying machine

L2 ANSWER 29 OF 51 CA COPYRIGHT 2009 ACS on STN

AB The elec. conductive endless belt with a substrate made of thermoplastic polyacetal, polymer alloy comprising **thermoplastic** polyacetal and **thermoplastic elastomer**, or blend of **thermoplastic** polyacetal and **thermoplastic elastomer** is used for transferring and conveying of a recording medium which is supported on the belt by electrostatic absorption. The medium is conveyed among 4 kinds of image-forming medium, i.e., electrophotog. photoconductor drums so that each of the color **toner** image is transferred by tandem process. Alternatively, the endless belt accepts the **toner** image and transfers the image to the recording medium. The electrophotog. app. using the belt is also claimed. The endless. . . .

ST elec conductive endless belt electrophotog app; polyacetal polymer alloy blend endless belt; **thermoplastic elastomer** polyacetal blend endless belt; tandem electrophotog copying machine

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L2 ANSWER 20 OF 51 CA COPYRIGHT 2009 ACS on STN

Full Text

AN 141:285738 CA  
 TI Electrostatographic **toners** containing specific **thermoplastic elastomers**  
 IN Iga, Takashi  
 PA Nippon Zeon Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004258429	A	20040916	JP 2003-50323	20030227
PRAI	JP 2003-50323		20030227		

=> d kwic 12 30-39

L2 ANSWER 30 OF 51 CA COPYRIGHT 2009 ACS on STN  
AB . . . The medium is conveyed among 4 kinds of image-forming medium, i.e., electrophotog. photoconductor drums so that each of the color **toner** image is transferred by tandem process. Alternatively, the endless belt accepts the **toner** image and transfers the image to the recording medium. The electrophotog. app. using the belt is also claimed. The endless. . .  
ST elec conductive endless belt electrophotog app; polyarylate polymer alloy blend endless belt; **thermoplastic elastomer** polyarylate blend endless belt; tandem electrophotog copying machine arom polyester

L2 ANSWER 31 OF 51 CA COPYRIGHT 2009 ACS on STN  
TI **Thermoplastic elastomer** compositions, electrically conductive roller made of the composition, and cartridge in electrophotographic apparatus  
AB The compn. contains a **thermoplastic elastomer** and a copolymer contg. a carboxylic acid anion and a metal cation. The copolymer may be ethylene-methacrylic acid copolymer, acrylic. . . layer made of the compn. and the electrophotog. cartridge involves the elec. conductive roller for charging and/or for transferring of **toner**. The compn. with small compression set provides the roller with the same quality as the roller using a vulcanized rubber. . .  
ST **thermoplastic elastomer** ionomer elec conductive roller; electrophotog app cartridge elec conductive roller; small compression set **thermoplastic elastomer** roller  
IT Carbon black, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(filler; in **thermoplastic elastomer** compns. for elec. conductive roller for cartridge in electrophotog. app.)  
IT Ionomers  
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
(in **thermoplastic elastomer** compns. for elec. conductive roller for cartridge in electrophotog. app.)  
IT Electrophotographic apparatus  
(rollers; **thermoplastic elastomer** compns. for elec. conductive roller for cartridge in electrophotog. app.)  
IT Synthetic rubber, properties  
RL: DEV (Device component use); PRP (Properties); USES (Uses)  
(styrene copolymer, Rabalon T 320C; **thermoplastic elastomer** compns. for elec. conductive roller for cartridge in electrophotog. app.)  
IT Electric conductors  
Electrophotographic apparatus  
(**thermoplastic elastomer** compns. for elec. conductive roller for cartridge in electrophotog. app.)  
IT **Thermoplastic** rubber  
RL: DEV (Device component use); PRP (Properties); USES (Uses)  
(**thermoplastic elastomer** compns. for elec. conductive roller for cartridge in electrophotog. app.)  
IT 25608-26-8, Himilan 1707 28516-43-0, Himilan 1554  
RL: MOA (Modifier or additive use); USES (Uses)  
(in **thermoplastic elastomer** compns. for elec. conductive roller for cartridge in electrophotog. app.)

L2 ANSWER 32 OF 51 CA COPYRIGHT 2009 ACS on STN  
AB . . . modifying the surface of the elastic layer by UV irradiating to form a surface-protecting layer. The elastic layer may be **thermoplastic elastomer**, epichlorohydrin rubber, etc. The part shows improved releasability from photoconductor and from **toner**.  
ST charging part photoconductor electrophotog app; elec insulating elastic layer surface modification; UV irradsn protective layer formation rubber; **thermoplastic elastomer** charging part electrophotog photoconductor

L2 ANSWER 33 OF 51 CA COPYRIGHT 2009 ACS on STN

TI Abrasion-resistant **thermoplastic elastomer**-based semiconductive composition and blade component using it for thickness control of electrophotographic carbon **toner**

AB The compn. comprise 100 wt. parts styrene-based **thermoplastic elastomer** contg. 3-25 wt. parts elec. conductive carbon black with sp. surface area 750-1000 m<sup>2</sup>/g and DBP oil absorption 300-500 mL/100. . . .

ST abrasion resistance styrene **thermoplastic elastomer** blend; carbon black styrene rubber semiconductive blend; hydrogenated SBR carbon black electrophotog blade; thickness **toner** controller electrophotog blade; charge controller SBR carbon black blend

IT Electrophotographic apparatus  
(blade; electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based semiconductive compn.)

IT Carbon black, uses  
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
(electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based semiconductive compn.)

IT Styrene-butadiene rubber, uses  
RL: DEV (Device component use); USES (Uses)  
(hydrogenated, block, triblock; electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based semiconductive compn.)

IT Styrene-butadiene rubber, uses  
RL: DEV (Device component use); USES (Uses)  
(hydrogenated, block; electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based semiconductive compn.)

IT 26100-53-8, Diethylaminoethyl methacrylate-styrene copolymer 103488-48-8  
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
(charge-controlling agent; electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based semiconductive compn.)

IT 694491-73-1  
RL: DEV (Device component use); USES (Uses)  
(styrene-butadiene rubber, hydrogenated, block, triblock; electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based semiconductive compn.)

IT 106107-54-4  
RL: DEV (Device component use); USES (Uses)  
(styrene-butadiene rubber, hydrogenated, block; electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based semiconductive compn.)

L2 ANSWER 34 OF 51 CA COPYRIGHT 2009 ACS on STN

TI Abrasion-resistant **thermoplastic elastomer**-based semiconductive composition and blade component using it for cleaning of electrophotographic carbon **toner**

AB The compn. comprise 100 wt. parts styrene-based **thermoplastic elastomer** contg. elec. conductive carbon black with sp. surface area 750-1000 m<sup>2</sup>/g and DBP oil absorption 300-500 mL/100 g 3-25, fillers. . . .

ST abrasion resistance styrene **thermoplastic elastomer** blend; carbon black styrene rubber semiconductive blend; hydrogenated SBR carbon black electrophotog blade; cleaner electrophotog blade abrasion resistance

IT Electrophotographic apparatus  
(blade; electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based semiconductive compn.)

IT Coupling agents  
(electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based semiconductive compn.)

IT Carbon black, uses  
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
(electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based

semiconductive compn.)

IT Clays, uses  
 RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
 (filler; electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based semiconductive compn.)

IT Styrene-butadiene rubber, uses  
 RL: DEV (Device component use); USES (Uses)  
 (hydrogenated, block, triblock; electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based semiconductive compn.)

IT Styrene-butadiene rubber, uses  
 RL: DEV (Device component use); USES (Uses)  
 (hydrogenated, block; electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based semiconductive compn.)

IT 14807-96-6, Talc, uses  
 RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
 (filler; electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based semiconductive compn.)

IT 694491-73-1  
 RL: DEV (Device component use); USES (Uses)  
 (styrene-butadiene rubber, hydrogenated, block, triblock; electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based semiconductive compn.)

IT 106107-54-4  
 RL: DEV (Device component use); USES (Uses)  
 (styrene-butadiene rubber, hydrogenated, block; electrophotog. **toner**-cleaning blade component composed of abrasion-resistant **thermoplastic elastomer**-based semiconductive compn.)

L2 ANSWER 35 OF 51 CA COPYRIGHT 2009 ACS on STN

TI **Toner** containing **thermoplastic elastomer** for developing electrostatic image

AB The title **toner** comprises at least a binder resin, a colorant, and a **thermoplastic elastomer**, wherein polymers with the mol. wt.  $\leq 10,000$ , in a mol. wt. distribution of THF-sol. polymers based on GPC, are contained in the **toners** at  $\geq 25\%$ . The **toner** avoids formation of fine particles in developing device and shows good antioffset properties.

ST **toner thermoplastic elastomer** antioffset property; mol wt distribution **toner**; fine particle free electrophotog **toner**

IT Polyester rubber  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (Grilax E 500; electrophotog. **toner** contg. polymers with regulated mol. wt. distribution including **thermoplastic elastomers**)

IT Electrophotographic **toners**  
 (electrophotog. **toner** contg. polymers with regulated mol. wt. distribution including **thermoplastic elastomers**)

IT Fluoropolymers, uses  
 Nitrile rubber, uses  
 Silicone rubber, uses  
 Thermoplastic rubber  
 Urethane rubber, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (electrophotog. **toner** contg. polymers with regulated mol. wt. distribution including **thermoplastic elastomers**)

IT Synthetic rubber, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (polyamide, Daiamid PAE; electrophotog. **toner** contg. polymers with regulated mol. wt. distribution including **thermoplastic elastomers**)

IT Polyamides, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (thermoplastic rubbers; electrophotog. **toner** contg. polymers with regulated mol. wt. distribution including **thermoplastic elastomers**)



IT 25767-47-9P, Butyl acrylate-styrene copolymer  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (binder; electrophotog. **toner** contg. polymers with regulated mol. wt. distribution including **thermoplastic elastomers**)

IT 9003-18-3  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (nitrile rubber, electrophotog. **toner** contg. polymers with regulated mol. wt. distribution including **thermoplastic elastomers**)

L2 ANSWER 36 OF 51 CA COPYRIGHT 2009 ACS on STN  
 AB . . . side with a layer of a couch or with a layer of a lacquer or with a layer of a **thermoplastic** or **elastomeric** material or with a powder coating which is dried at an increased temp. The material forming the image penetrates under. . .

IT Polysiloxanes, uses  
 Polysiloxanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (polyester-; transfer of electrophotog. **toner** images using metal intermediate carriers contg.)

IT Vinyl compounds, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (polymers; transfer of electrophotog. **toner** images using metal intermediate carriers contg.)

IT Polyesters, uses  
 Polyesters, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (polysiloxane-; transfer of electrophotog. **toner** images using metal intermediate carriers contg.)

IT Polyesters, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (silicone-; transfer of electrophotog. **toner** images using metal intermediate carriers contg.)

IT Electrophotography  
 (transfer of **toner** images using metal intermediate carriers in)

L2 ANSWER 37 OF 51 CA COPYRIGHT 2009 ACS on STN  
 TI Powder-type **toners** for electrostatic development  
 AB The **toners** comprise coloring agents and binders that contain **thermoplastic elastomers** and have storage elasticity (at 200°)  $8.0 \times 10^5 - 1.0 \times 10^4$  dyne/cm<sup>2</sup>. The **toners** are low-temp. fixable and prevents filming.

ST powder **toner** binder **thermoplastic elastomer**

IT Fluoropolymers  
 Polyesters, uses  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (**thermoplastic elastomer**; powder-type electrophotog. **toners** contg. **thermoplastic elastomers** as binders)

IT Viscoelastic materials  
 (thermoplastic; powder-type electrophotog. **toners** contg. **thermoplastic elastomers** as binders)

IT Alkenes, uses  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (polymers, **thermoplastic elastomer**; powder-type electrophotog. **toners** contg. **thermoplastic elastomers** as binders)

IT Electrophotographic developers  
 (**toners**, powder-type; powder-type electrophotog. **toners** contg. **thermoplastic elastomers** as binders)

IT 100-42-5D, Styrene, **thermoplastic elastomer**  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (powder-type electrophotog. **toners** contg. **thermoplastic elastomers** as binders)

IT 25213-39-2

RL: TEM (Technical or engineered material use); USES (Uses)  
(**toners** contg.; powder-type electrophotog. **toners**  
contg. **thermoplastic elastomers** as binders)

- L2 ANSWER 38 OF 51 CA COPYRIGHT 2009 ACS on STN  
TI Cleaning blades for **toner** on copying machine exposing drums and their manufacture  
AB The title blades, having JIS A hardness 50-80, are manufd. by annealing blades of plasticizer-free **thermoplastic** polyester-polyurethane **elastomer** (e.g., Kuramilon US 265, P-433N-NAT, H-885NAT) at 60-100° for 8-16 h.  
IT Annealing  
Blades  
(cleaning blades for **toner** on copying machine exposing drums and their manuf.)  
IT Copying process  
(app., cleaning blades for **toner** on copying machine exposing drums and their manuf.)  
IT Rubber, urethane, uses  
Urethane polymers, uses  
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)  
(polyester-, cleaning blades for **toner** on copying machine exposing drums and their manuf.)
- L2 ANSWER 39 OF 51 CA COPYRIGHT 2009 ACS on STN  
AB The title graft polymer compn. comprises a **thermoplastic elastomer** and a graft polymer prepd. by treatment of 100 parts C black with 10-500 parts a polymer reactive to C. . . the elastomer or (ii) by mixing 100 parts C black graft polymer and 5-200 parts of the elastomer at 50-350°. **Toners** and thermal transfer inks may contain the compn. The compn. shows good dispersibility in org. polymers, water, and org. solvents, and the **toners** and thermal transfer inks using the compn. provide durable images. Thus, styrene-glycidyl methacrylate copolymer 60, MA-100R (C black) 40, and Quintac 3450 (**thermoplastic elastomer**) 20 parts were kneaded at 160° to give a graft polymer.  
ST carbon black graft polymer **toner**; electrophotog **toner** ink **thermoplastic elastomer**  
IT Rubber, synthetic  
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
(electrophotog. **toners** and printing inks contg. carbon black graft polymers and **thermoplastic elastomers**)  
IT Printing, nonimpact  
(thermal-transfer, electrophotog. **toners** and printing inks contg. carbon black graft polymers and **thermoplastic elastomers**)  
IT Electrophotographic developers  
(**toners**, electrophotog. **toners** and printing inks contg. carbon black graft polymers and **thermoplastic elastomers**)  
IT 162024-56-8P  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(carbon-black filled; electrophotog. **toners** and printing inks contg. carbon black graft polymers and **thermoplastic elastomers**)  
IT 124752-62-1P, Glycidyl methacrylate-styrene graft copolymer  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(carbon-filled; electrophotog. **toners** and printing inks contg. carbon black graft polymers and **thermoplastic elastomers**)

=> d bib 35 37 12

L2 ANSWER 35 OF 51 CA COPYRIGHT 2009 ACS on STN  
Full Text  
AN 128:263919 CA  
OREF 128:52113a,52116a  
TI **Toner** containing **thermoplastic elastomer** for developing

electrostatic image  
 IN Fujimoto, Masaki; Konuma, Tsutomu; Shinba, Rika; Fujikawa, Hiroshi;  
 Tanikawa, Hirohide  
 PA Canon K. K., Japan  
 SO Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10073959	A	19980317	JP 1996-246917	19960830
PRAI	JP 1996-246917		19960830		

L2 ANSWER 37 OF 51 CA COPYRIGHT 2009 ACS on STN

Full Text

AN 124:131491 CA  
 OREF 124:24183a,24186a  
 TI Powder-type **toners** for electrostatic development  
 IN Kato, Koichi  
 PA Ricoh Kk, Japan  
 SO Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07271096	A	19951020	JP 1994-65321	19940401
PRAI	JP 1994-65321		19940401		

=> log h

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	101.02	101.24
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-24.96	-24.96

SESSION WILL BE HELD FOR 120 MINUTES  
 STN INTERNATIONAL SESSION SUSPENDED AT 12:11:03 ON 23 APR 2009

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
 SESSION RESUMED IN FILE 'CA' AT 12:32:02 ON 23 APR 2009  
 FILE 'CA' ENTERED AT 12:32:02 ON 23 APR 2009  
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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	101.02	101.24
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-24.96	-24.96

=> d ab 35

1 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE  
 The answer numbers requested are not in the answer set.  
 ENTER ANSWER NUMBER OR RANGE (1):end

=> d ab 35 12

L2 ANSWER 35 OF 51 CA COPYRIGHT 2009 ACS on STN  
 AB The title **toner** comprises at least a binder resin, a colorant, and a **thermoplastic elastomer**, wherein polymers with the mol. wt. ≤10,000, in a mol. wt. distribution of THF-sol. polymers based on GPC, are contained in the **toners** at ≥25%. The **toner** avoids formation of fine particles in developing device and shows good antioffset properties.

=> log h

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	104.11	104.33
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-25.74	-25.74

SESSION WILL BE HELD FOR 120 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 12:33:32 ON 23 APR 2009

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
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FILE 'CA' ENTERED AT 13:25:48 ON 23 APR 2009  
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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	104.11	104.33
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-25.74	-25.74

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